WHAT IS CLAIMED IS:

1   1.   A method of developing a technical standard in the process of

2   product development comprising:

3   generating a draft technical standard;

4   electronically circulating the draft technical standard to a review

5   group;

6   automatically attaching review group comments to the draft technical

7   standard;

8   electronically locking the draft technical standard;

9   electronically circulating the locked draft technical standard to an

10   approval group, the approval group members having access to the review group

11   comments;

12   collecting electronic approvals from each member of the review

13   group;

14   rendering the technical standard unchangeable once each member of

15   the review group has electronically approved of the draft technical standard; and

16   releasing the rendered technical standard for electronic access.

1   2.   A method of developing a technical standard as in claim 1

2   wherein generating a draft technical standard comprises:

3   electronically capturing a text-based document containing information

4   relating to the draft technical standard; and

5   electronically adding data-structured attributes to the captured

6   document.

1   3.   A method of developing a technical standard as in claim 2

2   further comprising searching for the technical standard based on the data-structured

3   attributes.

1   4.   A method of developing a technical standard as in claim 1

2   further comprising electronically tracking review and approval status.

1   5.   A method of developing a technical standard as in claim 1
2 further comprising electronically notifying specified users when the technical
3 standard is released.

1   6.   A method of developing a technical standard as in claim 1
2 further comprising storing the released technical standard in a globally accessible
3 database.

1   7.   A method of developing a technical standard as in claim 1
2 further comprising limiting access to the technical standard based on user
3 authorization.

1   8.   A method of developing a technical standard as in claim 7
2 further comprising approving a user for authorized access by collecting at least one
3 electronic approval.

1   9.   A method of developing a technical standard as in claim 7
2 further comprising approving a user for authorized access based on a role assigned
3 to the user.

1   10.   A method of developing a technical standard as in claim 1
2 further comprising:
3   determining that the technical standard is to be modified;
4   incrementing the version of the technical standard; and
5   circulating the incremented version technical standard to the approval
6 group.

1   11.   A method of developing a technical standard as in claim 1
2 further comprising:
3   translating the technical standard into at least one language/rendition
4 different than a language/rendition in which the technical standard was generated;
5 and
6   linking the translated technical standard to the technical standard.

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12.   A method of developing a technical standard as in claim 1 further comprising attaching additional documentation to the draft technical standard, the additional documentation accessible by members of the review group.

13.   A method of developing a technical standard as in claim 1 further comprising printing the rendered technical standard with a watermark including the print date.

14.   A method of developing a technical standard as in claim 1 further comprising:

storing the technical standard in a rendered format; and

storing the technical standard in a native format.

15.   A system for managing a technical standard, the system accessible by a plurality of product development users, the system comprising:

a development database holding a plurality of technical standards;

a rendition module in communication with the development database, the rendition module rendering an approved technical standard unchangeable; and

an interface module in communication with the development database and the plurality of product development users, the interface module operative to:

(a)   electronically circulate a draft technical standard to a review group,

(b)   automatically attach review group comments to the draft technical standard,

(c)   electronically lock the draft technical standard,

(d)   electronically circulate the locked draft technical standard to an approval group, the approval group members having access to the review group comments,

(e)   collect electronic approvals from each member of the approval group, and

18   (f)   permit electronic access to the technical standard after the
19   released approved technical standard is rendered
20   unchangeable.

1   16.   A system for managing a technical standard as in claim 15
2   further comprising:
3   a reference database holding a plurality of approved technical
4   standards; and
5   an integration module in communication with the reference database
6   and the development database, the integration module copying approved technical
7   standards from the development database to the reference database.

1   17.   A system for managing a technical standard as in claim 15
2   wherein the interface module is further operative to:
3   electronically capture a text-based document containing information
4   relating to the draft technical standard; and
5   electronically add data-structured attributes to the captured document.

1   18.   A system for managing a technical standard as in claim 17
2   wherein the interface module is further operative to permit a user to search for the
3   technical standard based on the data-structured attributes.

1   19.   A system for managing a technical standard as in claim 15
2   wherein the interface module is further operative to electronically notify specified
3   users when the technical standard is approved.

1   20.   A system for managing a technical standard as in claim 15
2   wherein the interface module is further operative to limit access to the technical
3   standard based on user authorization.

1   21.   A system for managing a technical standard as in claim 20
2   wherein the interface module is further operative to approve a user for authorized
3   access by collecting at least one electronic approval.

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1   22.   A system for managing a technical standard as in claim 15
2 wherein the interface module is further operative to permit an authorized user to
3 electronically track review and approval status.

1   23.   A system for managing a technical standard as in claim 15
2 wherein the interface module is further operative to:
3   increment the version of the approved technical standard; and
4   circulate the incremented version technical standard to the approval
5 group.

1   24.   A system for managing a technical standard as in claim 15
2 wherein the interface module is further operative to attach a translated version of the
3 technical standard to the released technical standard.

1   25.   A system for managing a technical standard as in claim 15
2 wherein the interface module is further operative to permit attaching additional
3 documentation to the draft technical standard, the additional documentation
4 accessible by members of the review group.

1   26.   A system for managing a technical standard as in claim 15
2 wherein the interface module is further operative to print the rendered technical
3 standard with a watermark including the print date.

1   27.   A method of specifying a product comprising:
2   developing at least one raw material object, each raw material object
3 described by at least one technical standard;
4   developing at least one product formula object, each formula object
5 described by at least one technical standard, each formula object specifying raw
6 material used in manufacturing the product;
7   permitting each product formula object to be linked with any raw
8 material object representing raw material used in manufacturing the product; and

9   developing at least one packaging material object, each packaging

10   material object described by at least one technical standard, each packaging material

11   object specifying at least one element of a package used to hold the product.

1   28.   A method of specifying a product as in claim 27 further

2   comprising:

3   developing at least one package object, each package object described

4   by at least one packing standard, each package object specifying at least one finished

5   package;

6   permitting each package object to be linked with any packaging

7   material object representing packaging material specified by the package object

8   packing standard; and

9   permitting each package object to be linked with any formula object

10   representing a formula specified by the packing standard.

1   29.   A method of specifying a product as in claim 27 further

2   comprising developing at least one plant object, each plant object specifying a plant.

1   30.   A method of specifying a product as in claim 29 further

2   comprising permitting each plant object to be linked to any formula object

3   specifying a product made in the plant.

1   31.   A method of specifying a product as in claim 29 further

2   comprising permitting each plant object to be linked to any raw material object

3   specifying raw material used by the plant.

1   32.   A method of specifying a product as in claim 29 further

2   comprising permitting each plant object to be linked to any packaging material

3   object specifying packaging material used by the plant.

1   33.   A method of specifying a product as in claim 27 further

2   comprising developing at least one brand object, each brand object specifying a

3   commercial brand.

1   34.   A method of specifying a product as in claim 33 further

2 comprising permitting each brand object to be linked to any formula object

3 specifying a product sold under the commercial brand.

1   35.   A method of specifying a product as in claim 27 further

2 comprising developing at least one material group object specifying a material

3 classification, the material group object linked to any raw material object specifying

4 material in the material classification.

1   36.   A method of specifying a product as in claim 27 further

2 comprising at least one material group object specifying a material classification, the

3 material group object linked to any packaging object specifying packaging in the

4 material classification.

1   37.   A method of specifying a product as in claim 27 wherein each

2 technical standard is linked to a security group object controlling access to the

3 technical standard.

1   38.   A method of specifying a product as in claim 27 wherein at

2 least one technical standard is linked to a standards object specifying an approval

3 lifecycle.

1   39.   A method of specifying a product as in claim 27 wherein at

2 least one technical standard is linked to a language/rendition object specifying at

3 least one language/rendition for presenting the standard.

1   40.   A method of specifying a product as in claim 27 wherein at

2 least one technical standard is linked to at least one comment object including

3 comments about the technical standard.

1   41.   A method of specifying a product as in claim 27 wherein at

2 least one technical standard is linked to at least one change request object specifying

3   at least one technical standard which needs to be reviewed, approved and
4   distributed.

1   42.   A method of specifying a product as in claim 27 wherein at
2   least one technical standard is linked to at least one person object specifying a
3   product development user.

1   43.   A method of specifying a product as in claim 42 wherein each
2   person object is linked to at least one peer review object specifying at least one
3   person which may review a technical standard change request.

1   44.   A method of specifying a product as in claim 42 wherein each
2   person object is linked to at least one approver object specifying at least one person
3   which approve a technical standard change request.

1   45.   A method of specifying a product as in claim 42 wherein each
2   person object is linked to at least one distribution object specifying to which persons
3   an approved technical standard is distributed.

1   46.   A method of specifying a product as in claim 27 further
2   comprising, for each technical standard:
3   rendering the technical standard unchangeable; and
4   circulating the technical standard for approval.

1   47.   A method of specifying a product as in claim 46 further
2   comprising:
3   collecting approvals for the technical standard; and
4   releasing the technical standard for distribution only after all required
5   approvals are obtained.

1   48.   A method of specifying a product as in claim 47 wherein
2   releasing the technical standard comprises storing the technical standard in a
3   globally accessible database.

1   49.   A method of specifying a product as in claim 47 further

2 comprising disassociating all approvals collected for the technical standard if the

3 technical standard is not to be distributed as rendered unchangeable.

1   50.   A method of specifying a product as in claim 27 wherein at

2 least one technical standard is associated with data-structured attributes.

1   51.   A method of specifying a product as in claim 50 further

2 comprising searching for a technical standard based on the standard data-structured

3 attributes.

1   52.   A method of specifying a product as in claim 27 further

2 comprising attaching at least one support document to at least one technical

3 standard, the support document providing additional information for at least one of

4 a group consisting of technical standard reviewers and technical standard approvers.

1   53.   A system for specifying a finished package, the finished

2 package having at least one product formula and at least one packaging material, the

3 system accessible by a plurality of product development users, the system

4 comprising:

5   a development database holding a plurality of technical standards, the

6 plurality of technical standards comprising:

7   (a)   at least one raw material technical standard specifying raw

8   material characteristics,

9   (b)   at least one product formula technical standard specifying

10   product characteristics, the product comprising at least one

11   raw material,

12   (c)   at least one packaging material technical standard specifying

13   characteristics of at least one packaging material, and

14   (d)   at least one packing standard specifying characteristics of at

15   least one finished package; and

16   an interface module in communication with the development database

17   and the plurality of product development users, the interface module operative to

18   permit at least one specified approver user to approve a selected technical standard.

1   54.   A system for specifying a finished package as in claim 53

2   further comprising a rendition module in communication with the development

3   database, the rendition module rendering a selected technical standard unchangeable.

1   55.   A system for specifying a finished package as in claim 53

2   further comprising a reference database, the selected technical standard released to

3   the reference database after all approvers have approved the technical standard.

1   56.   A system for specifying a finished package as in claim 53

2   further comprising an assistance module in communication with the users, the

3   assistance module providing on-line help in using the system.

1   57.   A system for specifying a finished package as in claim 53

2   wherein the interface module is further operative to permit at least one specified

3   reviewer user to review the selected technical standard.

1   58.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one raw material link

3   between a raw material object specified by at least one raw material technical

4   standard and a product formula object specified by at least one product formula

5   technical standard.

1   59.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one formula link between

3   a formula object specified by at least one formula technical standard and a package

4   object specified by at least one packing technical standard.

1   60.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one packaging material link

3   between a packaging material object specified by at least one packaging material

4   technical standard and a package object specified by at least one packing standard.

1   61.   A system for specifying a finished package as in claim 53

2   wherein the development database associates comments with at least one technical

3   standard.

1   62.   A system for specifying a finished package as in claim 53

2   wherein the development database associates at least one support document with at

3   least one technical standard.

1   63.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one brand object specifying

3   a commercial brand.

1   64.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one material group object

3   specifying a material classification.

1   65.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one security object

3   controlling access to at least one technical standard.

1   66.   A system for specifying a finished package as in claim 53

2   wherein the development database further associates an approval lifecycle with at

3   least one technical standard.

1   67.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one language/rendition

3   object specifying at least one language/rendition for presenting the standard.

1   68.   A system for specifying a finished package as in claim 53

2   wherein the development database further holds at least one change request

3 specifying at least one technical standard which needs to be reviewed, approved and

4 distributed.

1   69. A system for specifying a finished package as in claim 53

2 wherein the development database further holds at least one person object specifying

3 a user.

1   70. A system for specifying a finished package as in claim 53

2 wherein the development database further holds at least one peer review object

3 specifying users which may review a technical standard change request.

1   71. A system for specifying a finished package as in claim 53

2 wherein the development database further holds at least one approver object

3 specifying users which approve a technical standard change request.

1   72. A system for specifying a finished package as in claim 53

2 wherein the development database further holds at least one distribution object

3 specifying to which users an approved technical standard is distributed.

1   73. A system for specifying a finished package as in claim 53

2 wherein the development database associates data-structured attributes with at least

3 one technical standard.

1   74. A system for specifying a finished package as in claim 73

2 wherein the interface module is further operative to permit at least one user to

3 search for a technical standard based on data-structured attributes.

1   75. Computer-readable media having computer-readable

2 instructions for performing a method of specifying a product comprising:

3   developing at least one raw material object, each raw material object

4 described by at least one technical standard;

5   developing at least one product formula object, each formula object

6   described by at least one technical standard, each formula object specifying raw

7   material used in manufacturing a product;

8   permitting linking at least one product formula object with at least

9   one raw material object representing raw material used in manufacturing the

10   product;

11   developing at least one packaging material object, each packaging

12   material object described by at least one technical standard, each packaging material

13   object specifying at least one packaging material;

14   developing at least one package object, each package object described

15   by at least one technical standard, each package object specifying at least one

16   finished package;

17   permitting linking at least one package object with at least one

18   packaging material object representing packaging material used in the finished

19   package specified by the package object; and

20   permitting linking at least one package object with at least one

21   formula object representing a formula in the finished package specified by the

22   package object.

1   76.   Computer-readable media having computer-readable

2   instructions for performing a method of specifying a product comprising:

3   generating a draft technical standard;

4   electronically circulating the draft technical standard to a review

5   group;

6   automatically attaching review group comments to the draft technical

7   standard;

8   electronically locking the draft technical standard;

9   electronically circulating the locked draft technical standard to an

10   approval group, the approval group members having access to the review group

11   comments;

12   collecting electronic approvals from each member of the review

13   group;

14   rendering the technical standard unchangeable once each member of

15   the review group has electronically approved of the draft technical standard; and

16   releasing the rendered technical standard for electronic access.

1   77.   A database for specifying a global product comprising:

2   at least one raw material object;

3   at least one product formula object;

4   at least one packaging material object;

5   at least one package object;

6   at least one raw material link, each raw material link linking a

7   product formula object with a raw material object representing raw material used in

8   manufacturing a product specified by the formula object;

9   at least one packaging material link, each packaging material link

10   linking a package object with a packaging material object representing at least one

11   packaging material included in a finished package represented by the package object;

12   and

13   at least one formula link, each formula link linking a package object

14   with a formula object representing at least one product included in the finished

15   package.